

Claims

1.-14. (canceled)

15. (new) A method for establishing calls in a communications network comprising a fixed network section and a mobile network section, the method comprising:

- receiving a called party address in the fixed network from a calling party served by a fixed network switch; and
- determining if the called party address is a mobile called party address associated to a mobile called party served by the mobile section network;
- if the called party address is associated to mobile called party:
 - routing signaling messages associated with the establishment of the call to a first fixed network node capable of initiating queries to and receiving responses from a home location register of the mobile network section,
 - initiating a query from the first fixed network node to the home location register,
 - receiving a roaming number for the mobile called party by the first fixed network node register, and
 - routing the call based on the roaming number to a mobile network switch serving the mobile called party.

16. (new) The method according to claim 15, wherein determining if the called party address is associated to a mobile called party further comprises forwarding the call to a second fixed network switch when the first network switch is not configured for determining if the called party address is associated to a mobile called party.

17. (new) The method according to claim 15, wherein determining if the called party address is associated to a mobile called party further comprises:

- querying a database having the mobile called party address marked as potentially ported, and

treating the mobile called party address as a ported called party address by routing signaling messages associated with the establishment of the call to a number portability server.

18. (new) The method according to claim 17, wherein the number portability server is an enhanced number portability server capable of initiating queries and receiving responses from the home location register.

19. (new) The method according to claim 18, wherein the enhanced number portability server is a signaling transfer point operatively connected to or comprising a number portability database.

20. (new) The method according to claim 15, wherein determining if the called party address is associated to a mobile called party further comprises:

querying a database in which the mobile called party address is marked as an address requiring intelligent network handling, and

treating the mobile called party address as an intelligent network called party address by routing signaling messages associated with the establishment of the call to an intelligent network service control point.

21. (new) The method according to claim 20, wherein the intelligent network service control point is capable of initiating queries to and receiving responses from the home location register of the mobile network section.

22. (new) A Signaling Transfer Point (STP) of an SS7 network, comprising:
a connector for bi-directionally connecting to an SS7 link linking the STP to another SS7 entity;

a receiver for receiving a number portability query from a fixed network section of the network; and

a database query for querying a number portability database for determining if a called party address received in the number portability query is associated to a mobile called party served by a mobile network section of the network,

if the called party address is associated to the mobile called party:

a home location register query is initiated to a home location register associated with the mobile called party address, and

a roaming number is received for the mobile called party and returned as a response to the number portability query.

23. (new) The STP according to claim 22, further comprising the number portability database.

24. (new) A network arrangement for a communications network, comprising: a mobile network section comprising:

- a plurality of mobile subscriber terminals,
- a plurality of mobile network switches,
- a plurality of voice connections for interconnecting the mobile network switches,

- a home location register, and
- a plurality of signaling connections for connecting the mobile network switches to at least one signaling transfer point; and

- a fixed network section comprising:
 - a plurality of subscriber terminals,
 - a plurality of fixed network switches, at least one of the plurality of fixed network switches capable of:

- determining if a call originating in the fixed network section is terminating in the mobile network section,

- routing signaling messages associated with the establishment of the call terminating in the mobile network section to the fixed network node for obtaining a roaming number for completing the call, and

- directly routing the call to a mobile network switch currently serving a mobile called party based on the roaming number,

- a plurality of voice connections for interconnecting the fixed network switches,

- a plurality of signaling connections for connecting the fixed network switches to at least one signaling transfer point, and

a fixed network node capable of initiating queries to and receiving responses from the home location register.

25. (new) The network arrangement according to claim 24, wherein all of the plurality of fixed switches are capable of:

determining if a call originating in the fixed network section is terminating in the mobile network section,

routing signaling messages associated with the establishment of the call terminating in the mobile network section to the fixed network node for obtaining a roaming number for completing the call, and

directly routing the call to a mobile network switch currently serving a mobile called party based on the roaming number.

26. (new) The network arrangement according to claim 25, wherein determining if a call originating in the fixed network section is terminating in the mobile network section includes accessing a database in which a mobile called party address associated to the mobile called party is marked as potentially ported, and wherein the fixed network node is capable of initiating queries to and receiving response from the home location register comprising the signaling transfer point and a number portability database.

27. (new) The network arrangement according to claim 26, wherein the signaling transfer point comprising:

a connector for bi-directionally connecting to an SS7 link linking the STP to another SS7 entity,

a receiver for receiving a number portability query from a fixed network section of the network, and

a database query for querying a number portability database for determining if a called party address received in the number portability query is associated to a mobile called party served by a mobile network section of the network,

if the called party address is associated to the mobile called party:

a home location register query is initiated to a home location register associated with the mobile called party address, and

a roaming number is received for the mobile called party and returned as a response to the number portability query.

28. (new) The network arrangement according to claim 25, wherein determining if a call originating in the fixed network section is terminating in the mobile network section includes a database in which a called party address associated to the called party is marked as an address requiring intelligent network handling, and wherein the fixed network node is capable of initiating queries to and receiving responses from the home location register includes an intelligent network service control point capable of initiating queries to and receiving responses from the home location register.